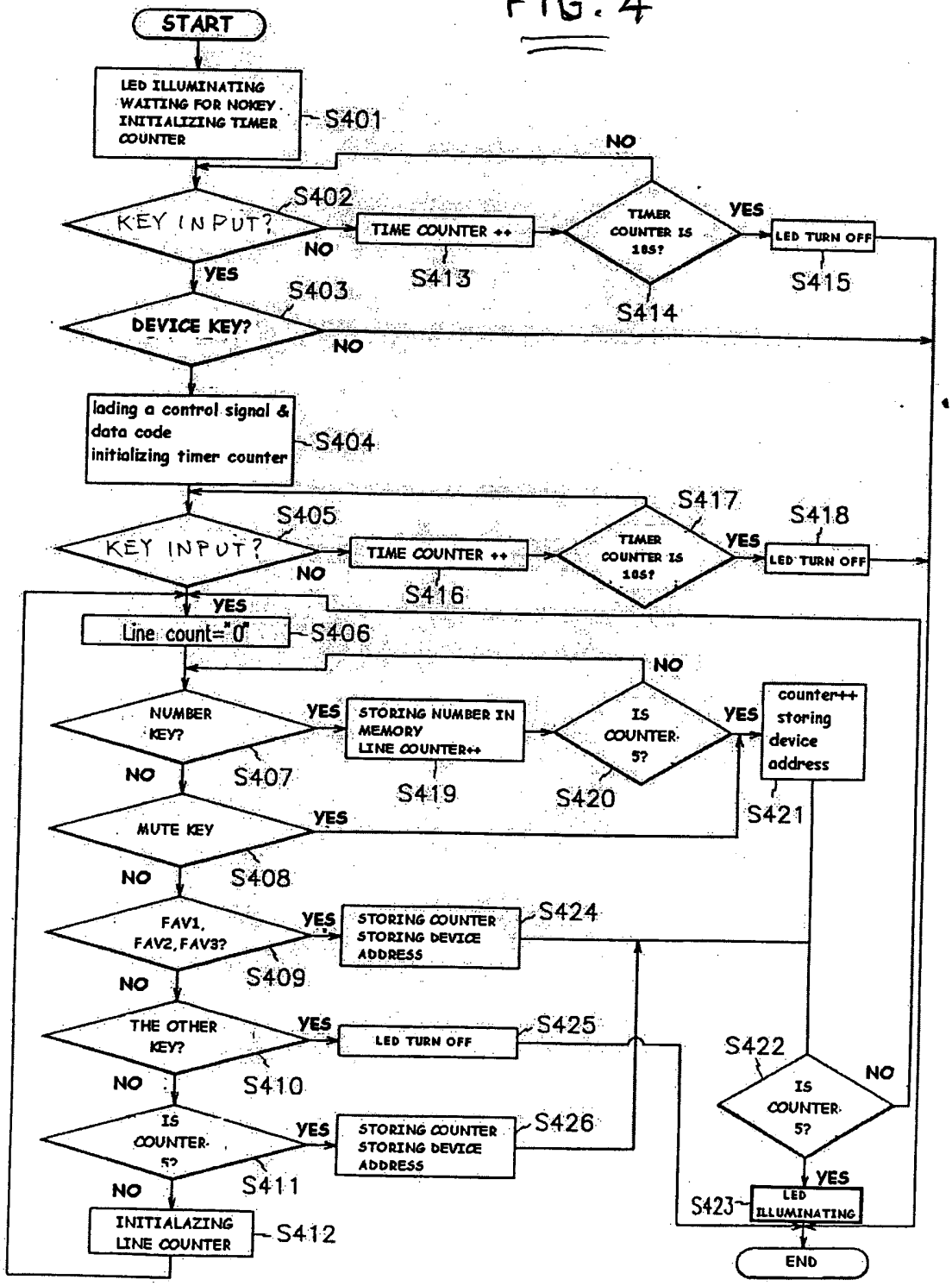
FIG. 4


START
LED ILLUMINATING WAITING FOR NOKEY INITIALIZING TIMER COUNTER
S401
KEY INPUT?
S402
NO
TIME COUNTER ++
S413
TIMER COUNTER IS 10S?
S414
YES
LED TURN OFF
S415
YES
DEVICE KEY?
S403
NO
lading a control signal & data code initializing timer counter
S404
KEY INPUT?
S405
NO
TIME COUNTER ++
S416
TIMER COUNTER IS 10S?
S417
YES
LED TURN OFF
S418
YES
Line count="0"
S406
NUMBER KEY?
S407
YES
STORING NUMBER IN MEMORY LINE COUNTER++
S419
IS COUNTER 5?
S420
YES
counter++ storing device address
S421
NO
MUTE KEY
S408
YES
FAV1, FAV2, FAV3?
S409
YES
STORING COUNTER STORING DEVICE ADDRESS
S424
THE OTHER KEY?
S410
YES
LED TURN OFF
S425
IS COUNTER 5?
S411
YES
STORING COUNTER STORING DEVICE ADDRESS
S426
INITIALAZING LINE COUNTER
S412
S422
IS COUNTER 5?
NO
YES
S423
LED ILLUMINATING
END

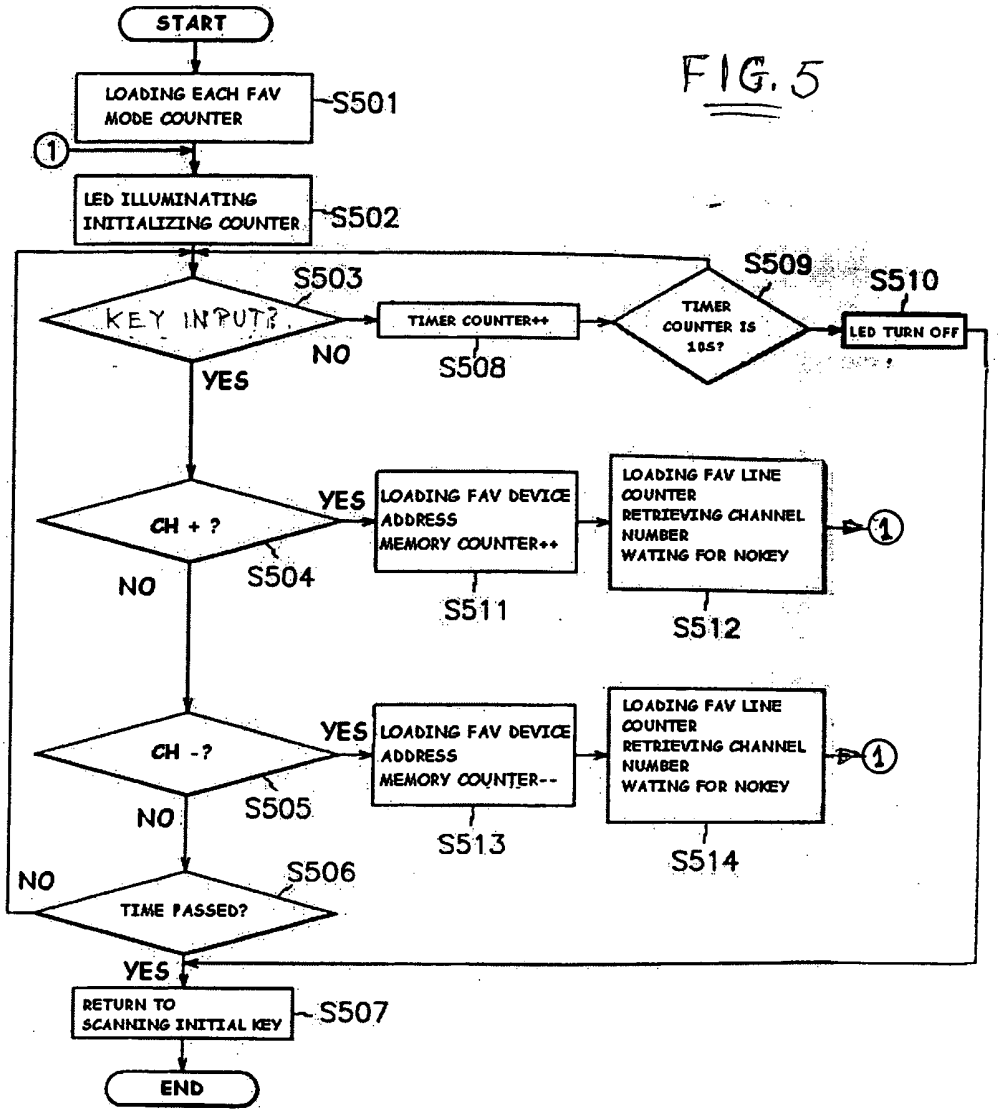

START
LOADING EACH FAV MODE COUNTER
S501
1
LED ILLUMINATING INITIALIZING COUNTER
S502
S503
KEY INPUT?
NO
YES
TIMER COUNTER++
S508
S509
TIMER COUNTER IS 10S?
S510
LED TURN OFF
CH + ?
YES
NO
S504
LOADING FAV DEVICE ADDRESS MEMORY COUNTER++
S511
LOADING FAV LINE COUNTER RETRIEVING CHANNEL NUMBER WATING FOR NOKEY
S512
1
CH -?
YES
NO
S505
LOADING FAV DEVICE ADDRESS MEMORY COUNTER--
S513
LOADING FAV LINE COUNTER RETRIEVING CHANNEL NUMBER WATING FOR NOKEY
S514
1
NO
S506
TIME PASSED?
YES
RETURN TO SCANNING INITIAL KEY
S507
END

FIG. 5

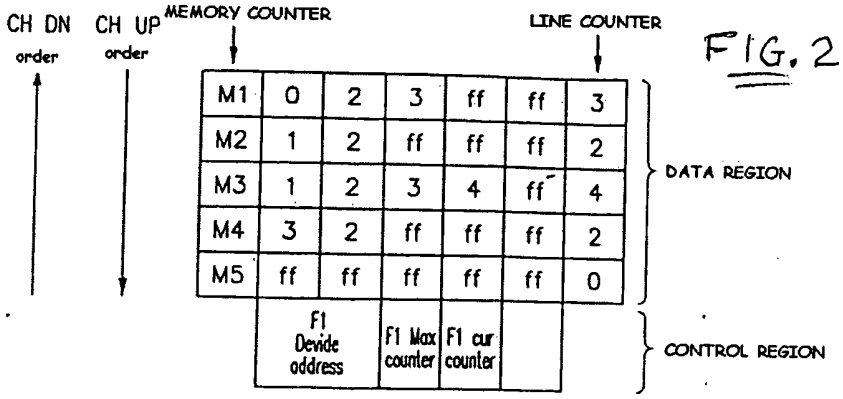

CH DN order
CH UP order
MEMORY COUNTER
LINE COUNTER
M1 0 2 3 ff ff 3
M2 1 2 ff ff ff 2
M3 1 2 3 4 ff 4
M4 3 2 ff ff ff 2
M5 ff ff ff ff ff 0
DATA REGION
F1 Devide address
F1 Max counter
F1 cur counter
CONTROL REGION

FIG. 2

FIG. 3

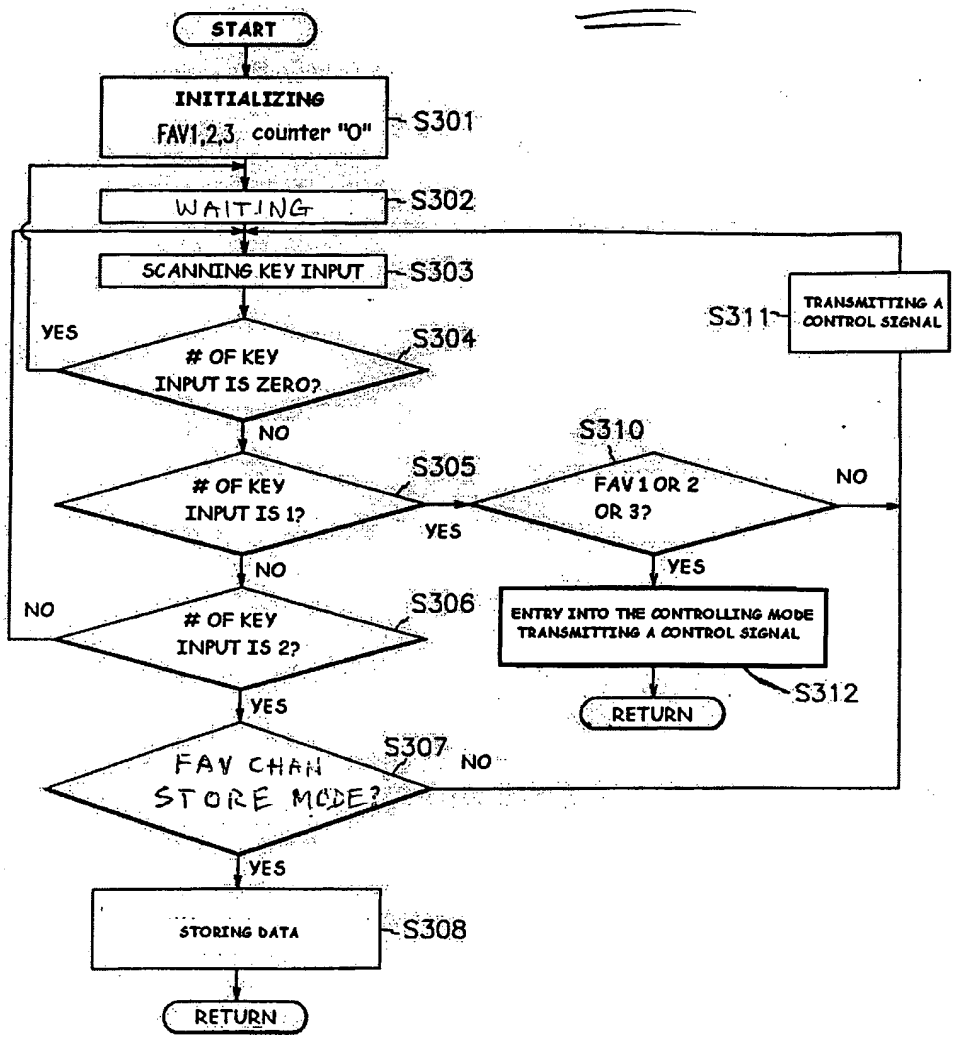
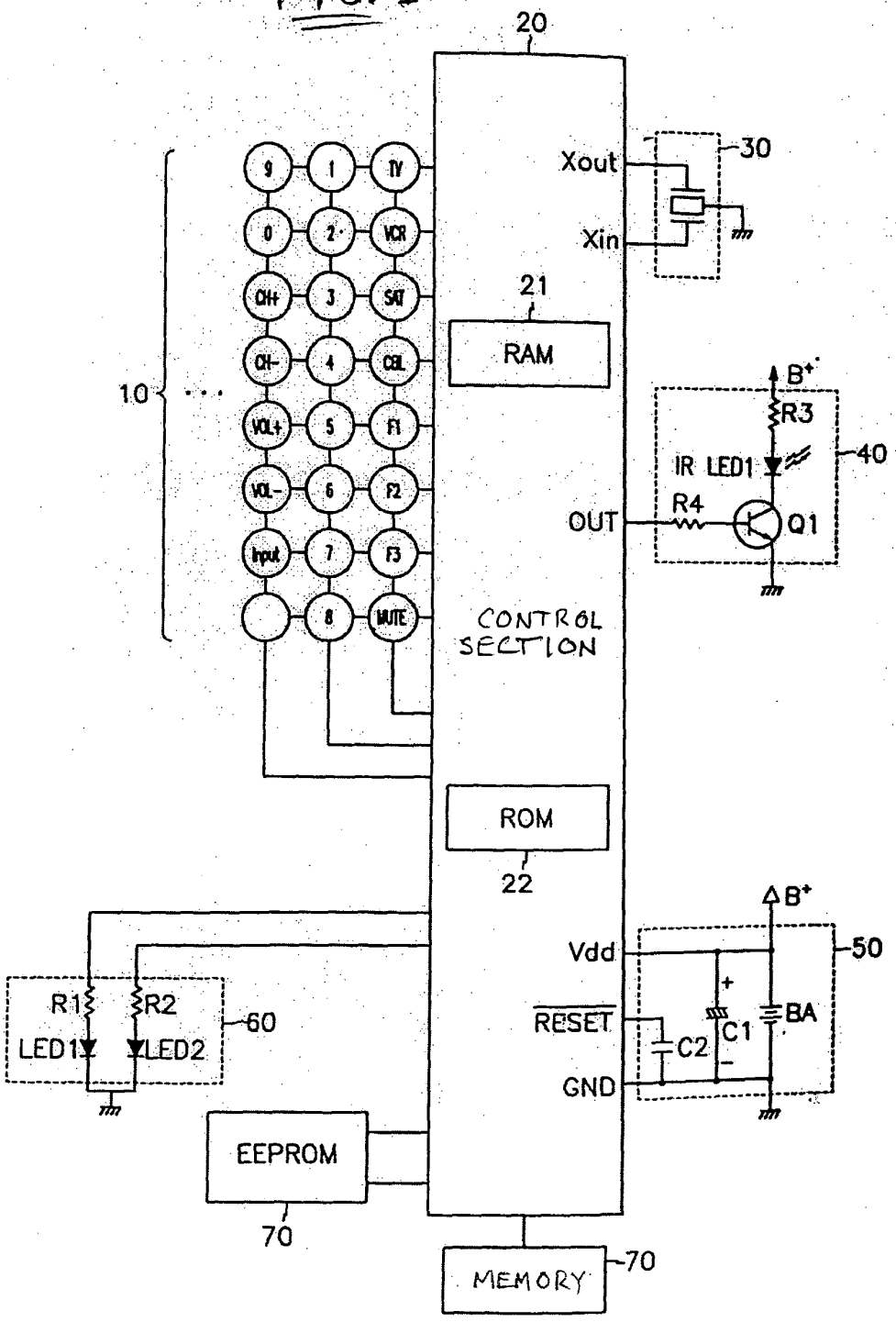

START
INITIALIZING
FAV1,2,3 counter "0"
S301
WAITING
S302
SCANNING KEY INPUT
S303
YES
OF KEY INPUT IS ZERO?
S304
NO
OF KEY INPUT IS 1?
S305
YES
NO
OF KEY INPUT IS 2?
S306
NO
YES
FAV CHAN STORE MODE?
S307
NO
YES
STORING DATA
S308
RETURN
S310
FAV 1 OR 2 OR 3?
NO
YES
ENTRY INTO THE CONTROLLING MODE TRANSMITTING A CONTROL SIGNAL
S312
RETURN
S311
TRANSMITTING A CONTROL SIGNAL

FIG. 1


20
Xout
Xin
30
21
RAM
10
9
1
TV
0
2
VCR
CH+
3
SAT
CH-
4
CBL
VOL+
5
F1
VOL-
6
F2
Input
7
F3
8
MUTE
CONTROL SECTION
B+
R3
IR LED1
40
R4
OUT
Q1
ROM
22
B+
Vdd
50
RESET
C1
BA
C2
GND
R1
R2
LED1
LED2
60
EEPROM
70
MEMORY
70